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SEQUENCE LISTING

<110> Cade, Rebecca M
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<120> INDUCIBLE PROMOTERS

<130> A-31089CIP1

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<150> 60/171,008

<151> 1999-12-15

<150> 60/175,519

<151> 2000-01-11

<160> 31

<170> PatentIn Ver. 2.1

<210> 1

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<212> DNA

<213> Arabidopsis thaliana

<220>

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<222> (68)..(433)

<223> gene product NI16

<220>

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<222> (142)..(147)

<223> SalI site

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<222> (344)..(349)

<223> EcoRI site

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ggctaac atg aac aac tct ttg aag aaa gaa gaa cgc gta gaa gaa gat 109
      Met Asn Asn Ser Leu Lys Lys Glu Glu Arg Val Glu Glu Asp
        1             5             10

aac gga aaa tct gac ggt aac aga ggg aaa ccg tcg acg gaa gtt gtt 157
Asn Gly Lys Ser Asp Gly Asn Arg Gly Lys Pro Ser Thr Glu Val Val
  15             20             25             30

cgg acg gta acg gag gaa gag gtg gat gag ttt ttc aag ata tta cgg 205
Arg Thr Val Thr Glu Glu Glu Val Asp Glu Phe Phe Lys Ile Leu Arg
          35             40             45

aga gta cac gtg gcg aca cga acg gtt gcg aaa gtt aac ggc ggt gtt 253
Arg Val His Val Ala Thr Arg Thr Val Ala Lys Val Asn Gly Gly Val
        50             55             60

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gct gag gga gag tta ccg tct aag aag agg aaa cgg agt cag aat ctt 301
Ala Glu Gly Glu Leu Pro Ser Lys Lys Arg Lys Arg Ser Gln Asn Leu
      65              70              75

ggg ttg aga aac tcg ttg gat tgt aac ggc gtt cga gac gga gaa ttc 349
Gly Leu Arg Asn Ser Leu Asp Cys Asn Gly Val Arg Asp Gly Glu Phe
      80              85              90

gat gag att aat cgg gtc ggg tta cag ggt ttg ggt ttg gat ctg aac 397
Asp Glu Ile Asn Arg Val Gly Leu Gln Gly Leu Gly Leu Asp Leu Asn
      95              100             105             110

tgt aaa ccg gaa cca gac agc gtt agt tta tcg ttg tagacttgta 443
Cys Lys Pro Glu Pro Asp Ser Val Ser Leu Ser Leu
      115              120

gtccttcctatg tttttccct tcttacaata atcaattttt ttttaactac aatacttttg 503

aaaaaa 509

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<210> 2
<211> 122
<212> PRT
<213> Arabidopsis thaliana

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<400> 2
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Lys Ser Asp Gly Asn Arg Gly Lys Pro Ser Thr Glu Val Val Arg Thr
      20              25              30

Val Thr Glu Glu Glu Val Asp Glu Phe Phe Lys Ile Leu Arg Arg Val
      35              40              45

His Val Ala Thr Arg Thr Val Ala Lys Val Asn Gly Gly Val Ala Glu
      50              55              60

Gly Glu Leu Pro Ser Lys Lys Arg Lys Arg Ser Gln Asn Leu Gly Leu
      65              70              75              80

Arg Asn Ser Leu Asp Cys Asn Gly Val Arg Asp Gly Glu Phe Asp Glu
      85              90              95

Ile Asn Arg Val Gly Leu Gln Gly Leu Gly Leu Asp Leu Asn Cys Lys
      100             105             110

Pro Glu Pro Asp Ser Val Ser Leu Ser Leu
      115             120

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<213> Arabidopsis thaliana

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<220>
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<222> (365)..(374)
<223> TCA1 motif

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 <222> (426)..(435)
 <223> TCA1 motif

<220>
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 <222> (609)..(614)
 <223> MYCATR22 element

<220>
 <221> misc_feature
 <222> (646)..(665)
 <223> CAMV AS1 salicylic acid response element

<220>
 <221> misc_feature
 <222> (707)..(712)
 <223> PAL BOX

<220>
 <221> misc_feature
 <222> (757)..(762)
 <223> HEXAMERAT 4 element

<220>
 <221> misc_feature
 <222> (863)..(1228)
 <223> NI16 genomic coding region

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 catgacaaat attaatatat cagtgttaat aacatgtttt gttcttaaaa tacatgcatt 120
 ttaaaatcag acatttggtt taaaatcaaa tctaactctt tatacacaaa cgacattgac 180
 ggaaaattca ggtaaaaaaga gaaaataaag aatgagagat agagagattt ctatggaaaa 240
 agaaagagag aacatgtagg tgaacaaaat aaagagatat gatgatatat tttatgagag 300
 gtggtgaaga ttattttagg agagggagag agaaatagaa aaagaaaatg acatggtgaa 360
 tctgaagaag atgaattgtg ttaaagatga agagagaaaag agaactccat ggctaaaagtc 420
 tcgtaaagaa gatgaaaaag aaacaaaaga aggaagaaga aagagaaagg ctaaaataga 480
 ctaactattg ccaaaatttc tgtagccgac aaatactatt tgggtccaagg ttattttgtg 540
 tattcttttg aagtcaaaag ttatttctta catatactct aaaaatatag ccgataccaa 600
 tttttccaca catggacttc ctttattcca aaagtcaata aagtgtgacg tcatgatact 660
 tacgctttta aacatcgcat gatgatgtca ttagcatcaa tctccaccgt ccaattttatt 720
 tagttgttga caatatcgac cgtctaagtt ccacaccgac ggctataaga gtttcattat 780
 aaatttttagc aaaaataaaat cagcaaataa ttttttcttg actaagctta aacgacgccg 840
 ttaacatttt cttctggcta acatgaacaa ctctttgaag aaagaagaac gcgtagaaga 900
 agataacgga aaatctgacg gtaacagagg gaaaccgtcg acggaagttg ttcggacggg 960
 aacggaggaa gaggtggatg agtttttcaa gatattacgg agagtacacg tggcgacacg 1020
 aacggttgcg aaagttaacg gcggtgttgc tgagggagag ttaccgtcta agaagaggaa 1080
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 ggaaccagac agcgttagtt tatcgttgta gacttgtagt ccttcatggt tttccccttc 1260
 ttacaataat caattttttt ttaactacaa tacttttgaa aaaaatggta aaagaagatt 1320
 attaacatgt tatccaaatt tcagattctt cagttttatt ttatacgtca aaagagaagt 1380
 tatataattg caaaactaca agtcaaacaa aagctattta agcgtttgac gttcctaaac 1440
 aacataaatt ttactaaaat caatgtttta aaaaagtgtt gatggtaaaag atatcaattg 1500
 ggcctttgcc tggcccggtt agtaatatgt cagagtaggt atgggcctgt ataagggagt 1560
 ccaaaaaaag agcgggcatt gcgggttggg tgcgtttgga actttggatt gtggattagt 1620
 catggtttat ctattaatgt ctgcggactt gtggacgacg cgcttgttct tcttctctctg 1680
 ttacgactt acgaacatat

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<210> 4
 <211> 608
 <212> DNA
 <213> Solanum tuberosum

<220>
 <221> CDS
 <222> (124)..(438)

<400> 4
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 tgagagaata aagagaagta attgcactag cagtattgac aattaatcag ctagccggct 120
 tga atg cta ctt atg gac gga gaa aag aag agg aag aga aca gca atc 168
 Met Leu Leu Met Asp Gly Glu Lys Lys Arg Lys Arg Thr Ala Ile
 1 5 10 15
 ggc gcc gga gat cgg agt aag gat gag gta gaa gct act gtg aag gag 216
 Gly Ala Gly Asp Arg Ser Lys Asp Glu Val Glu Ala Thr Val Lys Glu
 20 25 30
 gag gag ccg ccg tca gag gcg gag gtt gac gag ttc ttc gcg atc tta 264
 Glu Glu Pro Pro Ser Glu Ala Glu Val Asp Glu Phe Phe Ala Ile Leu
 35 40 45
 cgg agg atg cat gtg gcg gtg aaa tat ctc cag aga aat gct cag att 312
 Arg Arg Met His Val Ala Val Lys Tyr Leu Gln Arg Asn Ala Gln Ile
 50 55 60
 cgg ccg gaa aac ctt aac gca tcg ccg gcc ggt gct aac ggt gtc gca 360
 Arg Pro Glu Asn Leu Asn Ala Ser Pro Ala Gly Ala Asn Gly Val Ala
 65 70 75
 gct gga cgg aag aga gaa cgg gga atc gtg aga aaa ggt gat ttg gac 408
 Ala Gly Arg Lys Arg Glu Arg Gly Ile Val Arg Lys Gly Asp Leu Asp
 80 85 90 95
 ctc aac act ctg ccg gac ggc gga gac taa ttaacgcagt ttaagcatag 458
 Leu Asn Thr Leu Pro Asp Gly Gly Asp
 100 105
 gttaattaca taaatgcacc cttaattatc gtagattctt aagattgatc tgctgtacag 518
 attaattaat taaagccttt ttttatatat atttctccgg taaacggttt gctctttgtg 578
 attttcttta ataaatttaa tttattttat 608

<210> 5
 <211> 104
 <212> PRT
 <213> Solanum tuberosum

<400> 5
 Met Leu Leu Met Asp Gly Glu Lys Lys Arg Lys Arg Thr Ala Ile Gly
 1 5 10 15
 Ala Gly Asp Arg Ser Lys Asp Glu Val Glu Ala Thr Val Lys Glu Glu
 20 25 30
 Glu Pro Pro Ser Glu Ala Glu Val Asp Glu Phe Phe Ala Ile Leu Arg
 35 40 45

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Arg Met His Val Ala Val Lys Tyr Leu Gln Arg Asn Ala Gln Ile Arg
 50 55 60
 Pro Glu Asn Leu Asn Ala Ser Pro Ala Gly Ala Asn Gly Val Ala Ala
 65 70 75 80
 Gly Arg Lys Arg Glu Arg Gly Ile Val Arg Lys Gly Asp Leu Asp Leu
 85 90 95
 Asn Thr Leu Pro Asp Gly Gly Asp
 100

<210> 6
 <211> 349
 <212> DNA
 <213> Lycopersicon esculentum

<220>
 <221> CDS
 <222> (3)..(233)

<400> 6
 ct tcg gag gga gag gtg gat gag ttt ttc gca att tta cgg agg atg 47
 Ser Glu Gly Glu Val Asp Glu Phe Phe Ala Ile Leu Arg Arg Met
 1 5 10 15
 cac atg gcc gta aaa tat ctt cag aga aac gct cag att cag ccg gaa 95
 His Met Ala Val Lys Tyr Leu Gln Arg Asn Ala Gln Ile Gln Pro Glu
 20 25 30
 aac gtt aac gct cac ggc agc aag tta acc gca tcg ccg gcc ggt gtt 143
 Asn Val Asn Ala His Gly Ser Lys Leu Thr Ala Ser Pro Ala Gly Val
 35 40 45
 aac gga gat gca act gga cag aag aga gaa cgg gga atc gtg aga aaa 191
 Asn Gly Asp Ala Thr Gly Gln Lys Arg Glu Arg Gly Ile Val Arg Lys
 50 55 60
 ggt gat ttg gac ctc aac act ttg ccg gac tgc gga gac taa 233
 Gly Asp Leu Asp Leu Asn Thr Leu Pro Asp Cys Gly Asp
 65 70 75
 cgcagtttaa gcatagggtta attacagaaa tgcaccttta attatcgtag attcttaaga 293
 ttgatctgct gtacaaatta attaaatgaa gccttttttt atatataaaa aaaaaa 349

<210> 7
 <211> 76
 <212> PRT
 <213> Lycopersicon esculentum

<400> 7
 Ser Glu Gly Glu Val Asp Glu Phe Phe Ala Ile Leu Arg Arg Met His
 1 5 10 15
 Met Ala Val Lys Tyr Leu Gln Arg Asn Ala Gln Ile Gln Pro Glu Asn
 20 25 30
 Val Asn Ala His Gly Ser Lys Leu Thr Ala Ser Pro Ala Gly Val Asn
 35 40 45
 Gly Asp Ala Thr Gly Gln Lys Arg Glu Arg Gly Ile Val Arg Lys Gly
 50 55 60
 Asp Leu Asp Leu Asn Thr Leu Pro Asp Cys Gly Asp
 65 70 75

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<210> 8
 <211> 75
 <212> PRT
 <213> Glycine max

<400> 8
 Met Glu Val Glu Lys Arg Lys Asn Lys Arg Val Met Gly Glu Glu Glu
 1 5 10 15
 Glu Ser Glu Arg Val Lys Asn Lys Arg Leu Lys Gly Val Glu Glu Glu
 20 25 30
 Asp Gly Ser Asp Gly Val Pro Thr Glu Glu Glu Val Glu Glu Phe Phe
 35 40 45
 Ala Ile Leu Arg Arg Met Arg Met Ala Val Lys Tyr Phe Asp Asp Lys
 50 55 60
 Gly Arg Gly Gly Arg Glu Trp Arg Glu Ala Leu
 65 70 75

<210> 9
 <211> 90
 <212> PRT
 <213> Glycine max

<400> 9
 Gly Gly Val Pro Thr Glu Glu Glu Val Glu Glu Phe Phe Ala Ile Leu
 1 5 10 15
 Arg Arg Met Arg Val Ala Val Lys Tyr Phe Asp Asp Lys Gly Ser Gly
 20 25 30
 Gly Lys Glu Trp Arg Lys Ala Leu Glu Thr Ala Glu Leu Thr Val Asp
 35 40 45
 His Arg His Asp Val Val Ala Ala Glu Glu Asp Asp Lys Pro Arg Lys
 50 55 60
 Lys Gly Gly Glu Val Ile Ile Asn Glu Gly Phe Asp Leu Asn Ala Val
 65 70 75 80
 Ala Pro Glu Ala Ala Glu Gly Gly Gly Ala
 85 90

<210> 10
 <211> 85
 <212> PRT
 <213> Nicotiana tabacum

<400> 10
 Met Asp Gly Glu Lys Lys Arg Lys Arg Thr Glu Asn Gly Lys Ala Asn
 1 5 10 15
 Gly Gly Asp Arg Asn Arg His Glu Arg Lys Ser Ala Ala Asn Glu His
 20 25 30

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Thr Ala Val Ser Pro Pro Pro Ser Glu Ala Glu Val Asp Glu Phe Phe
35 40 45
Ala Ile Leu Arg Arg Met His Val Ala Val Arg Tyr Leu Gln Glu Ser
50 55 60
Gly Gln Lys Arg Val Val Pro Lys Gly Asp Leu Asp Leu Asn Thr Leu
65 70 75 80
Pro Gly Asn Gly Asp
85

<210> 11
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer NIM5'RI

<400> 11
ggaacgaatt catggacacc accattg 27

<210> 12
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
NIM3'SalI

<400> 12
aaaaaagtcg actaagagca agagtc 26

<210> 13
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
NIMtrunc3'NcoI

<400> 13
cgatctccat ggcagcttgt cc 22

<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
NIMloop5'RI

<400> 14
gaaccgaatt catgatcgca 20

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<210> 15
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer 16GSP1

<400> 15
 ttccggttta cagttcagat 20

<210> 16
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer GSP2

<400> 16
 gacccgatta ataatctcat cg 22

<210> 17
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 17
 caccatttct ggttgagggt 20

<210> 18
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer 16F

<400> 18
 acgacgccgt taacattttc 20

<210> 19
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer 16R

<400> 19
 gaaggggaaa aacatgaagg a 21

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<210> 20
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer
 NI16-DegF

<220>
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 <222> (1)..(26)
 <223> n = a, t, c, or g

<400> 20
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26

<210> 21
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR primer
 NI16-DegR

<220>
 <221> misc_feature
 <222> (1)..(27)
 <223> n = a, t, c, or g

<400> 21
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27

<210> 22
 <211> 413
 <212> DNA
 <213> Arabidopsis thaliana

<220>
 <221> CDS
 <222> (1)..(336)
 <223> NI19

<400> 22
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 Met Asp Arg Asp Arg Lys Arg Val Lys Met Glu Lys Glu Asp Asp Glu
 1 5 10 15

gaa gaa aag atg gag aag ttg tac aca gtg ctt aaa aac gca agg gaa 96
 Glu Glu Lys Met Glu Lys Leu Tyr Thr Val Leu Lys Asn Ala Arg Glu
 20 25 30

atg cgg aaa tat gtc aac agc tcc atg gag aag aag aga cag gaa gaa 144
 Met Arg Lys Tyr Val Asn Ser Ser Met Glu Lys Lys Arg Gln Glu Glu
 35 40 45

gaa gaa aga gca agg gtt cgt aga ttc cct tcg ttt cag cca gaa gat 192
 Glu Glu Arg Ala Arg Val Arg Arg Phe Pro Ser Phe Gln Pro Glu Asp
 50 55 60

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ttc att ttc atg aat aaa gca gag gcc aac aac att gaa aaa gca gct      240
Phe Ile Phe Met Asn Lys Ala Glu Ala Asn Asn Ile Glu Lys Ala Ala
65                      70                      75                      80

aat gag agc tct tca gca tcc aac gag tat gat ggc tct aag gaa aag      288
Asn Glu Ser Ser Ser Ala Ser Asn Glu Tyr Asp Gly Ser Lys Glu Lys
                        85                      90                      95

caa gaa gga tct gag act aac gtt tgt tta gac ttg aat ctt tct ctg      336
Gln Glu Gly Ser Glu Thr Asn Val Cys Leu Asp Leu Asn Leu Ser Leu
                        100                     105                     110

tagcatacat acatacaaga gacaaagagc tcttcagttt ctgtataagc aacaaagaat      396

gtagtaact acgtacc                                                    413

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<210> 23
<211> 112
<212> PRT
<213> Arabidopsis thaliana

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<400> 23

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Met Asp Arg Asp Arg Lys Arg Val Lys Met Glu Lys Glu Asp Asp Glu
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Glu Glu Lys Met Glu Lys Leu Tyr Thr Val Leu Lys Asn Ala Arg Glu
20                     25                     30

Met Arg Lys Tyr Val Asn Ser Ser Met Glu Lys Lys Arg Gln Glu Glu
35                     40                     45

Glu Glu Arg Ala Arg Val Arg Arg Phe Pro Ser Phe Gln Pro Glu Asp
50                     55                     60

Phe Ile Phe Met Asn Lys Ala Glu Ala Asn Asn Ile Glu Lys Ala Ala
65                      70                      75                      80

Asn Glu Ser Ser Ser Ala Ser Asn Glu Tyr Asp Gly Ser Lys Glu Lys
85                      90                      95

Gln Glu Gly Ser Glu Thr Asn Val Cys Leu Asp Leu Asn Leu Ser Leu
100                     105                     110

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<210> 24
<211> 962
<212> DNA
<213> Arabidopsis thaliana

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<400> 24

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tgtgtttctc agaaatagca cgaaatattt ataaaaagca tgcaattctc ttatagatcg      60

cgaagttaa aaaaacatat agaattgtta caatattaca tgggttttta ttggataaca      120

tgacaaatat ttatttattt catgagtttt tattggatag catgacaaat attaatatat      180

cagtgttaat aacatgtttt gttcttaaaa tacatgcatt ttaaaatcag acatttgttt      240

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taaaatcaaa tctaattctct tatatcacia cgacattgac ggaaaattca ggtaaaaaga 300
gaaaataaag aatgagagat agagagattt ctatggaaaa agaaagagag aacatgtagg 360
tgaacaaaat aaagagatat gatgatatat tttatgagag gtggtgaaga ttatttttagg 420
agaggggagag agaaatagaa aaagaaaatg acatgggtgaa tctgaagaag atgaattgtg 480
ttaaagatga agagagaaaag agaactccat ggctaaagtc tcgtaaagaa gatgaaaaag 540
aaacaaaaga aggaagaaga aagagaaaag ctaaaataga ctaactattg ccaaaatttc 600
tgtagccgac aaatactatt tggccaagg ttattttgtg tattcttttg aagtcaaaag 660
ttatttctta catatactct aaaaatatag ccgataccaa tttttccaca catggacttc 720
ctttattcca aaagtcaata aagtgtgacg tcatgatact tacgctttaa aacatcgcat 780
gatgatgtca ttagcatcaa tctccaccgt ccaatttatt tagttgttga caatatcgac 840
cgtctaagtt ccacaccgac ggctataaga gtttcattat aaattttagc aaaataaaat 900
cagcaaataa ttttttcttg actaagctta aacgacgccg ttaacatttt cttctggcta 960
ac 962

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<210> 25
<211> 862
<212> DNA
<213> Arabidopsis thaliana

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<400> 25
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ttaaaatcag acatttggtt taaaatcaaa tctaattctct tatatcacia cgacattgac 180
ggaaaattca ggtaaaaaga gaaaataaag aatgagagat agagagattt ctatggaaaa 240
agaaagagag aacatgtagg tgaacaaaat aaagagatat gatgatatat tttatgagag 300
gtggtgaaga ttatttttagg agaggggagag agaaatagaa aaagaaaatg acatgggtgaa 360
tctgaagaag atgaattgtg ttaaagatga agagagaaaag agaactccat ggctaaagtc 420
tcgtaaagaa gatgaaaaag aaacaaaaga aggaagaaga aagagaaaag ctaaaataga 480
ctaactattg ccaaaatttc tgtagccgac aaatactatt tggccaagg ttattttgtg 540
tattcttttg aagtcaaaag ttatttctta catatactct aaaaatatag ccgataccaa 600
tttttccaca catggacttc ctttattcca aaagtcaata aagtgtgacg tcatgatact 660
tacgctttaa aacatcgcat gatgatgtca ttagcatcaa tctccaccgt ccaatttatt 720
tagttgttga caatatcgac cgtctaagtt ccacaccgac ggctataaga gtttcattat 780
aaattttagc aaaataaaat cagcaaataa ttttttcttg actaagctta aacgacgccg 840

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ttaacatttt cttctggcta ac 862

<210> 26
 <211> 274
 <212> DNA
 <213> Arabidopsis thaliana

<400> 26

tctaaaaata tagccgatac caatttttcc acacatggac ttcctttatt ccaaaagtca 60
 ataaagtgtg acgtcatgat acttacgctt taaaacatcg catgatgatg tcattagcat 120
 caatctccac cgtccaattt atttagttgt tgacaatatac gaccgtctaa gttccacacc 180
 gacggctata agagtttcat tataaatttt agcaaaataa aatcagcaaa taattttttc 240
 ttgactaagc ttaaacgacg ccgttaacat tttc 274

<210> 27
 <211> 544
 <212> DNA
 <213> Arabidopsis thaliana

<400> 27

agattatttt aggagagggg gagagaaata gaaaaagaaa atgacatggg gaatctgaag 60
 aagatgaatt gtgttaaaga tgaagagaga aagagaactc catggctaaa gtctcgtaaa 120
 gaagatgaaa aagaaacaaa agaaggaaga agaaagagaa aggctaaaat agactaacta 180
 ttgccaaaat ttctgtagcc gacaaatact atttgggtcca aggttatattt gtgtattctt 240
 ttgaagtcaa aagtattttc ttacatatac tctaaaaata tagccgatac caatttttcc 300
 acacatggac ttcctttatt ccaaaagtca ataaagtgtg acgtcatgat acttacgctt 360
 taaaacatcg catgatgatg tcattagcat caatctccac cgtccaattt atttagttgt 420
 tgacaatatac gaccgtctaa gttccacacc gacggctata agagtttcat tataaatttt 480
 agcaaaataa aatcagcaaa taattttttc ttgactaagc ttaaacgacg ccgttaacat 540
 tttc 544

<210> 28
 <211> 274
 <212> DNA
 <213> Arabidopsis thaliana

<400> 28

tctagaaata tagccgatac caatttttcc acacatggac ttcctttatt ccaaaagtca 60
 ataaagtgtg acgtcatgat acttacgctt taaaacatcg catgatgatg tcattagcat 120
 caatctccac cgtccaattt atttagttgt tgacaatatac gaccgtctaa gttccacacc 180

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gacggctata agagtttcat tataaatttt agcaaaataa aatcagcaaa taattttttc 240
 ttgactaagc ttaaacgacg ccgttaacat tttc 274

<210> 29
 <211> 2001
 <212> DNA
 <213> Artificial

<220>
 <223> GUS reporter gene with an intron

<400> 29

atggtccgtc ctgtagaaac cccaaccgt gaaatcaaaa aactcgacgg cctgtgggca 60
 ttcagtctgg atcgcaaaa ctgtggaatt gatcagcgtt ggtgggaaag cgcgttacia 120
 gaaagccggg caattgctgt gccaggcagt tttaacgac agttcgccga tgcagatatt 180
 cgtaattatg cgggcaacgt ctggatcatg cgcgaagtct ttataccgaa aggttgggca 240
 ggccagcgtg tcgtgctgctg tttcgatgctg gtcactcatt acggcaaagt gtgggtcaat 300
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